133 Calicut, Cochin, Alleppey, Quilon and Trivan-
361 drum), are situated on the coast, divided by chains of little fishing villages. In the northern
133 half a railway runs along its edge from Manga-
361 lore in South Canara, southeast to Shoranur,
496 where it divides and turns off northeast to Mad-ras and south to Ernakulam, the capital of Cochin State. In the extreme south another railway comes in from Tinnevelly District in the east, and follows the coast from Quilon to Trivandrum. (See Map 1.)

133 The midlands comprise low hills and fertile
24 valleys. Broad strips of alluvial rice-lands lie in the valleys, thinning out as the land rises into the foothills of the Ghats. On the hill slopes are gardens of coconut palms, tapioca, plantains, pepper, ginger, rubber, cashew-nut trees, and many fruit trees such as jack and mango. Cashews (introduced by the Portuguese) and pepper have become for the past 100 years particularly important cash crops on the hill-slopes of North Malabar District, while bamboo is more prevalent in South Malabar District and Cochin. The coconut is ubiquitous and very important in the total economy. There are a few small bazaar
[361] towns, [3] but most of the people live in villages, on garden land surrounding or surrounded by wet paddy-flats.

133 The highlands rising into the Ghats are covered
[136] mainly by thick virgin forests harbouring wild elephant and small tigers. The foothills are
[162] sparsely populated by people of the same cultural groups as are found in the plains, while higher in the mountains live primitive tribes.

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North Kerala Nayar

439 food and other goods. The population expanded and much formerly
[161] waste land was brought under cultivation as gardens for the produc-
[241] tion of coconuts, pepper, cashew nuts, and cinnamon. Higher in the
[464] mountains Europeans developed estates of tea, coffee, and spices,
[496] which attracted wage labor from villages to the west. The develop-
ment of the steamship, the opening of the Suez Canal in 1869, and
the entry of railways into Kerala in the 1860's were significant events
in this process.

Political and Economic Systems

564
[566] Traditionally, a hierarchy of the major Hindu castes was present as
in Central Kerala, except that large areas of North Kerala had no
Pulayas or agricultural serfs (*ibid.*, I: 148). Nambudiri Brahmans
were fewer than in Central Kerala, but they controlled a small num-
ber of temple estates and claimed religious superiority over the Nayar
439 rulers. Muslims were the dominant trading population of the ports
563 and inland trading centers.

631 The mountainous terrain, heavy rainfall, poor communications,
sparse population, and comparatively low productivity made politi-
cal centralization more difficult than in Central Kerala. The ancient
Kolattiri kingdom was divided into chiefdoms and villages in a man-
ner similar to the later kingdom of the Zamorin, but judicial con-
trol was perhaps never as well centralized as in the Calicut kingdom.
175 From the fourteenth century, when the Zamorins captured most of
635 the Arab trade, the Kolattiri kingship lost some of its former power.
[634] The kingdom disintegrated into three smaller, virtually independent
kingdoms—Kolattunad, Kottayam, and Kadattunad—plus a number
of small border chiefdoms of uncertain allegiance (*ibid.*, I: 343–344).
174 Each of the three North Kerala kingdoms probably had a population
161 of between 150,000 and 250,000, in contrast to the Calicut kingdom,
635 which seems to have numbered some 600,000 to 720,000 (see note
5, page 473).

175 After 1500 each of the North Kerala rulers sought the help of one
648 or another of the mutually hostile European and Middle Eastern trad-
634 ing powers, thus maintaining a state of fragmentation until the My-
635 sorean conquest. In the struggles of the seventeenth and eighteenth
centuries some new Nayar chiefs also arose with mushroom rapidity
on the basis of European support and gained partially autonomous
sway over small groups of villages. Political and social mobility among
Nayar aristocrats was thus more marked in North Kerala than in the
more stable central kingdoms. Indeed, a North Kerala proverb re-

11: India G-4,5 (1960-1961) 1962 AW11 Kerala AW11

Cashewnut industry, by the very nature of the process involved, does not require much of capital equipment. Although the average size of cashewnut factories is about 400 workers per unit, capital requirements in the industry hardly exceed Rs. 200 per worker. Even the coir and cotton textile factories in Kerala use only the handlooms. Existence of handlooms within the precincts of textile factories is, in fact, a unique phenomenon in Kerala (especially the Malabar region). Only a dozen out of over 300 textile factories use modern equipment. Nowhere else in India can this be seen.

1.46 The contrast between a well-developed primary sector and a backward industrial sector is also brought out by comparative wage statistics for the two sectors. It has already been pointed out that in spite of a high degree of unemployment in the agricultural sector, the wage rates and average household earnings, though low, do not compare very unfavourably with the average for all-India. On the other hand, the average annual earnings of workers in factories covered by the Payment of Wages Act are only Rs. 736 per worker. As may be seen from the table below, this figure is one of the lowest in the whole of India.

AVERAGE ANNUAL EARNINGS OF FACTORY EMPLOYEES, 1956

	Rs.
Andhra	595
Assam	1,526
Bihar	1,236
Bombay	1,415
Madhya Pradesh	982
Madras	950
Orissa	947
Punjab	991
Uttar Pradesh	1,014
West Bengal	1,142
KERALA	736

SOURCE: *Statistical Abstract of India* (1957-58).

Overhead Facilities

1.47 In respect of overhead facilities, Kerala is fortunately better placed than many other parts of India. This has been the result of a progressive policy followed by the Governments of the erstwhile States of Travancore and Cochin, whose rulers took an active interest in the development of various public amenities and tried to attract industrialists from other parts of India to invest in Kerala.

1.48 In the sphere of transport, the coverage of Railways is rather limited, total route mileaghe being only 543 miles. This is, however, more than compensated by the wide network of roadways, which in spite of its many drawbacks, is superior to that in most other parts of India. The extent of road mileage per 100 square miles as well as the vehicle density in Kerala are the highest in the country. Road transport is, in general, more suited to conditions prevailing in Kerala than Railways because of the uneven nature of the terrain.

Transport

5.46 The entire coastline of Kerala is well served by the railways. From Trivandrum to Kayankulam and from Tirur to Manjeswar, a total distance of 220 miles, the tracks are only two to three miles from the sea coast. In addition, there is a motorable road running almost all along the entire coastline. Head loads, bicycles, motor lorries, all these modes are employed for the transportation of fish to the markets depending on the distance of the landing sites from the consuming centres.

5.47 The State Fisheries Department operates four insulated vans. In addition, the Department operates two insulated carrier boats, one from Cochin and the other from Azhikode. These boats transport iced-fish through the inland waters to the interior places. For the marketing of fish in the interior areas, the Indo-Norwegian Project operates eight refrigerated vans.

5.48 It is estimated that the State will require about 60 road vehicles, and 20 carrier vessels during the next 10 years. The capital expenditure on these is expected to be about Rs. 40 lakhs, of which Rs. 15 lakhs would be required during the Third Plan. The trucks and carrier vessels should, as far as possible, be owned and operated by Fishermen's Cooperative Societies. Expansion of insulated wagon facilities on the railways will be equally necessary. Insulated wagons should be provided on routes connecting the major production centres with the consumption centres.

Marketing

5.49 The marketing of fish in Kerala is not well organized. At present it is controlled by a few moneylenders and fish merchants. The fishermen are very poor and have generally to depend on borrowings during the off season. A departmental survey reveals that in 1958 the fishermen in Kerala had total assets of only about Rs. 30 lakhs against a total debt of Rs. 135 lakhs. Only a small percentage of the fishermen in Kerala own the boats and nets they use. Most of them work as employees under few boat-owner fishermen. In the pay-off period the boat-owner advances small amounts to the fishermen for their day-to-day needs. The catch is auctioned at the landing centres. The bidders include the fish curers, the retailers and lorry owners, who generally supply fish to the retailers.

5.50 Fish prices fluctuate considerably even in the course of the day. Fish is never weighed in the market. They are measured by standards such as heap, basket, and number, and these vary from market to market. The important wholesale fish markets in the State are located at Trivandrum, Kottayam, Tonur, Trichur, Kozhikode, Alwaye, Changanacherry and Athirumpuzha.

5.51 Changanacherry, Athirumpuzha and Vaniyankulam are the most important markets for cured and salted fish. In the coastal areas the consumption of dried fish is confined mostly to the off-season when fishing totally stops. In the interior of the State, owing to lack of transport facilities, cured fish is sold for the major part of the year. The State has a number of retail fish markets, every town or a group of villages having at least one.

5.52 Fish marketing in Kerala requires a great deal of improvement, both

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embark and disembark every month at the two airports of the State in Trivandrum and Cochin.

8.3 The State's transport system has to meet not only the requirements of the internal movement of traffic and the needs of inter-State and overseas trade and commerce of the State, but also the traffic connected with the import and export trade of adjoining areas in the neighbouring States. Calicut and Cochin provide suitable inlets and outlets for the intake of oil fuels, cotton, hardware and machinery, fertilizers and foodgrains, and for exports of tea, coffee, etc.

The Transport System

8.4 The transport system of the State consists of:

A. Sections of the Southern Railway, 543 miles long; (broad gauge 331 miles; metre gauge 204 miles; mixed gauge 8 miles), serving port-towns such as Cochin, Quilon and Calicut, and other important industrial centres.

B. A road network made up of national and provincial highways (1,432 miles) and district and village roads (9,307 miles).

C. A unique inland waterway system of navigable rivers and coastal and cross canals, 1,178 miles long.

D. Thirteen ports, including a major port at Cochin, and two active minor ports at Calicut and Alleppey.

E. One hundred and eleven statute miles of airways, with airports at Trivandrum and Cochin.

8.5 Nearly 145,000 persons,[1] constituting 2.93 per cent of the working force of the State are engaged in transportation and account for an annual income of Rs. 8.697 crores.

8.6 The features of this system, particularly in relation to the physical and financial (investment) demands that the growth of the State's economy may make on it in the coming decade (1961–71) are highlighted here for each medium of transport.

THE RAILWAYS

8.7 In relation to the extent of area served (14,992 sq. miles), the railway mileage per 100 square miles of State territory (3.6 miles) compares favourably with all-India (2.7 miles) and Mysore (2.2 miles); Madras State is better served with 4.4 miles per 100 square miles. The railway mileage per 100,000 of population in the State is however, only 3.4 miles, slightly less than a third of what it is for all-India, viz., 9.5 miles. The corresponding figures for the adjoining States of Mysore and Madras are higher being 6.2 and 5.6 miles respectively. The comparatively lower average

[Text continues on p. 127]

[1] 1951 Census figures.

11: India G-4, 5 (1960-1961) 1962 AWll Kerala AWll

MAP 11

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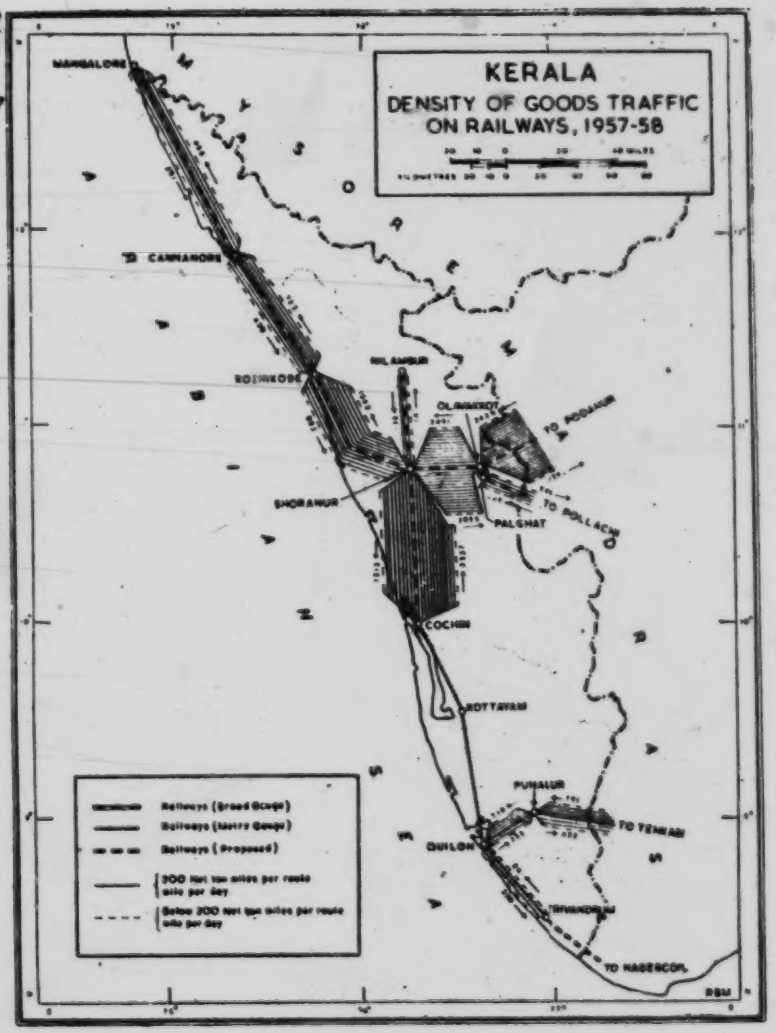

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for Kerala is to be ascribed to the State's high density of population.[1] Within the State, the districts of Quilon, Palghat, Calicut, Trichur and Cannanore are more favourably placed with regard to railways than others. Alleppey, which is least provided with railway mileage and facilities, and the districts of Kottayam and Ernakulam make up for their low railway mileage through roads and extensive waterways.[2]

8.8 The region south of Ernakulam and Cochin is served by the metre gauge line, and the region north of these by broad gauge. There is break of gauge in Ernakulam, involving transhipment of through traffic moving north or south as the case may be. Cochin harbour, however, is served by both gauges, the metre gauge giving access to the south, and the broad gauge to the north, and north-east of the State as well as the adjoining areas of the Madras State.

8.9 As the main railway line from Trivandrum to Kasargod lies almost all along the coast, except for the section between Ernakulam and Karthikapalli on the Ernakulam-Quilon section, railway facilities are not within easy reach of the eastern border areas of the State. Also a potential traffic route from Trivandrum to Tirunelveli *via* Nagercoil and Cape Comorin remains untouched by the railways.

8.10 On many sections of the railway within the State there is spare line capacity (Table 37).[3] Though at present Cochin-Shoranur section has some spare line capacity, it may be called on to handle considerable increases in traffic, requiring additional line capacity. In the hinterland of Calicut Port, however, there appears to be enough capacity to cope up with additional demands that industrial and port developments there may generate.

8.11 In the railway sections within the State, the traffic is not balanced. The inward (or import) movements generally trend to exceed the outward (or export) movements as measured by net ton miles per route miles, per day. The imbalance has been maximum on the Cochin-Shoranur line and had tended to increase. However, since 1955–57, the imbalance has tended to reverse its direction. Shoranur-Calicut, Shoranur-Punalur, Quilon-Trivandrum Central, Punalur-Quilon are other sections where imbalances may be observed. The twin problems of additional demands on line capacity and uneliminated imbalance of traffic are both likely to show up together on the Cochin-Shoranur line, as the traffic to and from Cochin harbour registers an increase.

8.12 The pressure of passenger-traffic bookings, already heavy at Calicut, Quilon, Ernakulam, Alwaye and Trivandrum Central, is likely to get very much accentuated since these are precisely the locations where growth of urban concentrations is likely to come about with the development of the new industries proposed by the National Council for the decade 1961–71.

[1] The backwardness is compensated by waterways, coastal movement and a working road and road transport system.

[2] The regional provision of railways is as follows:

	Mileage per 100 sq. miles	*Mileage per 100,000 population*
Travancore-Cochin area	3.13	2.56
Malabar area	4.22	5.02

[3] [Table 37, appearing on p. 294 of the text, has not been processed - Analyst]

12:Peter E-5 (1939, 1949)1963 AWll Kerala AWll

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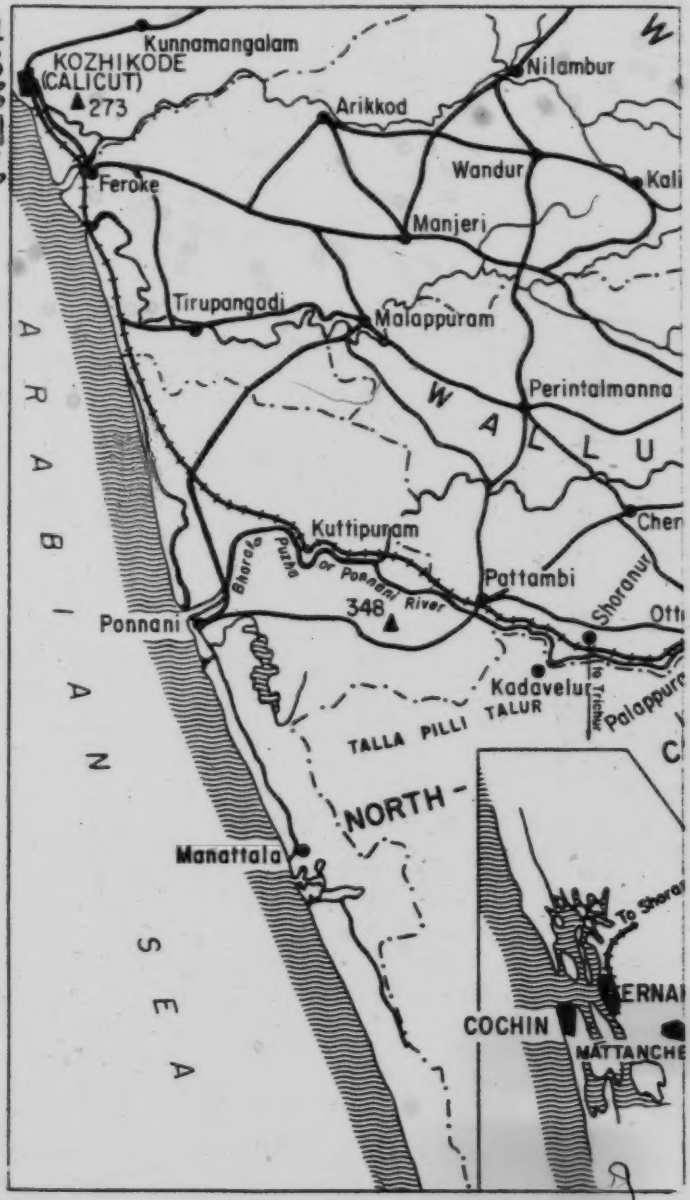

Map II. Map of South Malabar and North Cochin in Kerala.

[facing P. 176-A]

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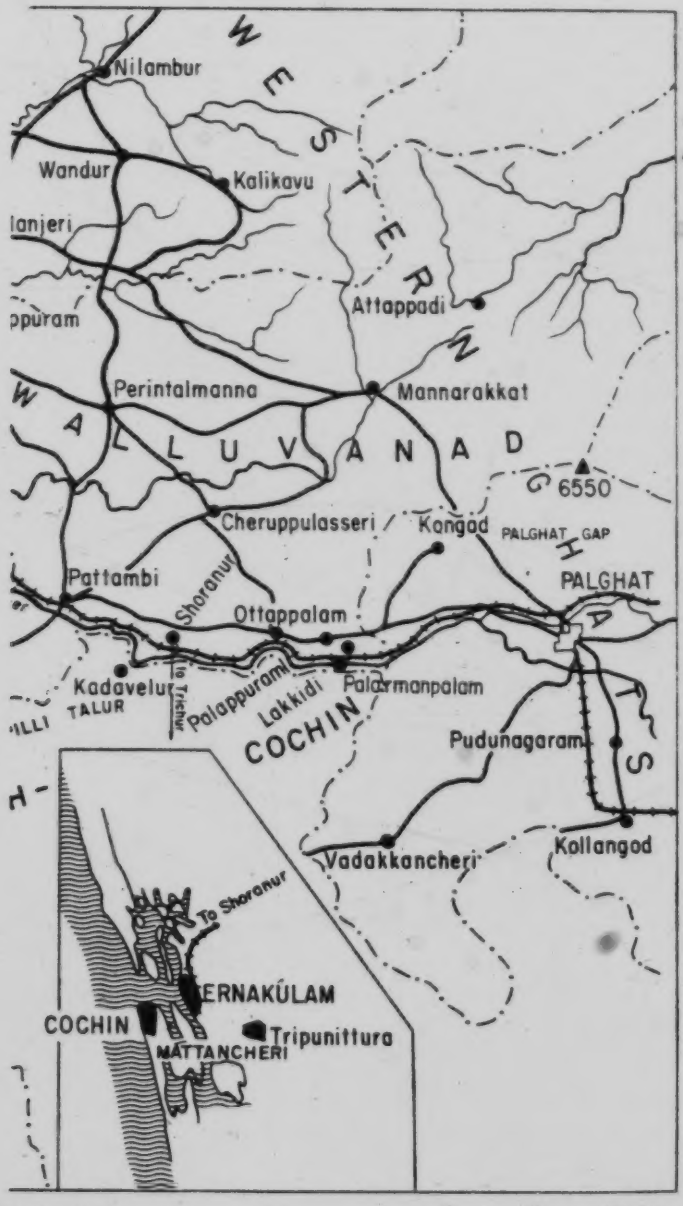

in in Kerala.

[facing P. 176-B]

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